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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/826,183		04/04/2001	Ruggero Maria Santilli	3293.004A	9175	
24040	7590	07/08/2005		EXAMINER		
DENNIS G. LAPOINTE I			TOOMER,	TOOMER, CEPHIA D		
	PO BOX 1294				PAPER NUMBER	
TARPON SP	RINGS,	FL 34688-1294		1714		

DATE MAILED: 07/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	09/826,183	SANTILLI, RUGGERO MARIA					
Office Action Summary	Examiner	Art Unit					
	Cephia D. Toomer	1714					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timety filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on <u>28 March 2005</u> .							
2a) This action is <b>FINAL</b> . 2b) This action is non-final.							
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
·	Ex parte quayro, 1000 o.b.	, 100 0.0. 210.					
Disposition of Claims  4)  Claim(s) 111-135 is/are pending in the application 4a) Of the above claim(s) is/are withdrated 5)  Claim(s) is/are allowed.  6)  Claim(s) 111-135 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/	awn from consideration.						
Application Papers							
9) The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119	•						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date	5) Notice of Inform 6) Other:	ail Date nal Patent Application (PT					
PTOL-326 (Rev. 1-04) Office A	Action Summary	Part of Paper No./Mai	u ⊔ate 070205				

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## **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 28, 2005 has been entered.
- 2. This Office action is in response to the amendment filed March 28, 2005 in which claims 1-111 were canceled and claims 112-135 were added.

## Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 111-135 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 112 is rejected because it is not clear what constitutes "a substantially pure population". The term substantially is indefinite.

Claims 119-126 are rejected because there is no proper antecedent support for "said essentially."

Claim 131 is rejected because it is not clear how these limitations apply to the chemical species. This claim appears to be directed to a combustion method.

# Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 111-120, 122 and 125 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hueschen (US 3,778,654).

Hueschen teaches an alloy of molybdenum and tungsten. The alloy is a solid solution and has a grain size that is smaller as compared to pure molybdenum and the atoms of the alloy are in clusters (see col. 2, lines 36-43). Hueschen teaches that clustering of the atoms is a desirable property (see col. 2, lines 63-66). Since Hueshen teaches the same substantially pure population of clusters, those limitations regarding spectrometric properties are inherently taught by Hueschen.

Accordingly, Hueschen teaching all the material limitations of the claims anticipates the claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cephia D. Toomer Primary Examiner Art Unit 1714

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